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09/392,925 09/09/99 PARKES

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EXAMINER

NAME, E

ART UNIT

PAPER NUMBER

1754

DATE MAILED:

03/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/392,925

Applicant(s)

Parkes

Examiner

Eileen E. Nave

Group Art Unit

1754



☒ Responsive to communication(s) filed on Jan 5, 2001

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-23 is/are pending in the application.

Of the above, claim(s) 10-20 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-9 and 21-23 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Response to Amendment

1. The amendment filed on January 5, 2001 has been entered as Paper No. 6. Claims 1 and 6 have been amended. Claims 21-23 have been added. Claims 1-9 and 21-23 are now under consideration.

Response to Argument

2. In response to applicants' arguments, the rejections of (A) claims 1, 2, 5 and 6 under 35 U.S.C. 102(b) as being anticipated by RU 2021560 C1, (B) claims 1-9 under 35 U.S.C. 103(a) as being unpatentable over RU 2021560 C1, and (C) claims 1-6 under 25 U.S.C. 103(a) as being unpatentable over RU 2045675 C1 in view of RU 2021560 C1, are withdrawn. Please consider the new rejections of claims 1-9 and 21-23, which follows.

New Rejections

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 21-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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(A) Claims 21-23 recite the limitation "the contaminated water" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was

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made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-9 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over RU 2021560 C1 in view of GB 2306884 A.

RU 2021560 C1 discloses the disposal of solid rocket fuel by combustion in the rocket body comprising placing the charge with the opening for combustion products upwards and filling with coolant to a level which separates the main part of the combustion surface. During the combustion, coolant is supplied to the combustion chamber to regulate the combustion process. Water of neutralizing solutions of soda and alkali are used as coolant. RU 2021560 C1 also discloses that this method increases safety (see English Abstract).

RU 2021560 C1 does not disclose that the coolant (e.g., enclosure of liquid) is annularly sprayed to completely surround the location in which the burning occurs. However it would have been obvious to one of ordinary skill in the art at the time the invention was made to annularly spray the coolant to completely surround the location in which the burning occurs in the process of RU 2021560 C1 because GB 2306884 A teaches annularly spraying a liquid to generate a liquid dispersion to at least surround the explosive body (e.g., the propellant of the rocket motor) to reduce the effect or suppress an explosion (see Abstract).

Neither RU 2021560 C1 nor GB 2306884 A disclose removing the venturi mechanism in the rocket prior to the burning step; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to remove the venturi mechanism in the rocket prior

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to the burning step in the process of RU 2021560 C1 because one of ordinary skill in the art would remove the venturi mechanism for safety reasons.

Neither RU 2021560 C1 nor GB 2306884 A disclose that the motor is clamped in a substantially vertical position with exhaust end facing up; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to clamp the motor in a substantially vertical position with exhaust end facing up in the process of RU 2021560 C1 because one of ordinary skill in the art would secure the motor in place with exhaust end facing up to allow for exhaust gas to freely release upward to ensure safety.

Neither RU 2021560 C1 nor GB 2306884 A disclose filtering liquid in the enclosure and recycling the filtered liquid; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to filter liquid in the enclosure and recycle the filtered liquid in the process of RU 2021560 C1 because one of ordinary skill in the art would optimize the process for cost efficiency reasons by filtering and reusing valuable coolant already present instead of buying and using new coolant and also having to deal with disposing of used coolant.

Neither RU 2021560 C1 nor GB 2306884 A disclose deflecting contaminated water to within a shroud or hood; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to deflect contaminated water to within a shroud or hood in the process of RU 2021560 C1 because it is well known in the art and conventional to use a shroud or hood to avoid the spread of contaminated water/vapor into the atmosphere or earth.

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9. Claims 1-9 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2306884 A in view of RU 2021560 C1.

GB 2306884 A discloses the effect on an explosion is reduced by annularly spraying a liquid to generate a liquid dispersion to at least partly surround an explosive body and detonating the explosive body in the liquid dispersion (see Abstract).

GB 2306884 A does not disclose that the explosive body is a rocket motor having a propellant. However, it would have been obvious to one of ordinary skill in the art at the time was made to use a rocket motor having a propellant in the process of GB 2306884 A because a propellant is an explosive body and RU 2021560 C1 teaches that solid fuel rocket motors can be combusted in the presence of a liquid coolant to regulate and increase safety in the destruction of rocket motors (see English Abstract).

GB 2306884 A does not specifically disclose what the liquid coolant may be; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use neutralizing solutions of soda and alkali are used as coolant in the process of GB 2306884 A because RU 2021560 C1 teaches supplying coolant to a combustion chamber to regulate the combustion process in the disposal of solid rocket fuel by combustion in a rocket body (see English Abstract).

Neither GB 2306884 A nor RU 2021560 C1 disclose removing the venturi mechanism in the rocket prior to the burning step; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to remove the venturi mechanism in the rocket prior

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to the burning step in the process of GB 2306884 A because one of ordinary skill in the art would remove the venturi mechanism for safety reasons.

Neither GB 2306884 A nor RU 2021560 C1 disclose that the motor is clamped in a substantially vertical position with exhaust end facing up; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to clamp the motor in a substantially vertical position with exhaust end facing up in the process of GB 2306884 A because one of ordinary skill in the art would secure the motor in place with exhaust end facing up to allow for exhaust gas to freely release upward to ensure safety.

Neither GB 2306884 A nor RU 2021560 C1 disclose filtering liquid in the enclosure and recycling the filtered liquid; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to filter liquid in the enclosure and recycle the filtered liquid in the process of GB 2306884 A because one of ordinary skill in the art would optimize the process for cost efficiency reasons by filtering and reusing valuable coolant already present instead of buying and using new coolant and also having to deal with disposing of used coolant.

Neither GB 2306884 A nor RU 2021560 C1 disclose deflecting contaminated water to within a shroud or hood; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to deflect contaminated water to within a shroud or hood in the process of GB 2306884 A because it is well known in the art and conventional to use a shroud or hood to avoid the spread of contaminated water/vapor into the atmosphere or earth.

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10. Claims 1, 3, 5-8 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over RU 2045675 C1 in view of GB 2306884 A.

RU 2045675 C1 discloses a solid fuel rocket motor combustion and destruction rig which has a combustion chamber containing housing with a bottom inlet ports set vertically inside the combustion chamber, a solid fuel charge inside the housing and a tank of a liquid coolant connected to the housing through its inlet. The housing's inlet is located at the bottom and its outlet at the top and part of its inner free space is filled with the liquid coolant (see English Abstract).

RU 2045675 C1 does not disclose that the coolant (e.g., enclosure of liquid) is annularly sprayed to completely surround the location in which the burning occurs. However it would have been obvious to one of ordinary skill in the art at the time the invention was made to annularly spray the coolant to completely surround the location in which the burning occurs in the process of RU 2021560 C1 because GB 2306884 A teaches annularly spraying a liquid to generate a liquid dispersion to at least surround the explosive body (e.g., the propellant of the rocket motor) to reduce the effect or suppress an explosion (see Abstract).

Neither RU 2045675 C1 nor GB 2306884 A disclose removing the venturi mechanism in the rocket prior to the burning step; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to remove the venturi mechanism in the rocket prior to the burning step in the process of RU 2045675 C1 because one of ordinary skill in the art would remove the venturi mechanism for safety reasons.

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Neither RU 2045675 C1 nor GB 2306884 A disclose that the motor is clamped in a substantially vertical position with exhaust end facing up; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to clamp the motor in a substantially vertical position with exhaust end facing up in the process of GB 2306884 A because one of ordinary skill in the art would secure the motor in place with exhaust end facing up to allow for exhaust gas to freely release upward to ensure safety.

Neither RU 2045675 C1 nor GB 2306884 A disclose filtering liquid in the enclosure and recycling the filtered liquid; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to filter liquid in the enclosure and recycle the filtered liquid in the process of RU 2045675 C1 because one of ordinary skill in the art would optimize the process for cost efficiency reasons by filtering and reusing valuable coolant already present instead of buying and using new coolant and also having to deal with disposing of used coolant.

Neither RU 2045675 C1 nor GB 2306884 A disclose deflecting contaminated water to within a shroud or hood; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to deflect contaminated water to within a shroud or hood in the process of GB 2306884 A because it is well known in the art and conventional to use a shroud or hood to avoid the spread of contaminated water/vapor into the atmosphere or earth.

11. Claims 1, 3, 5-8 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2306884 A in view of RU 2045675 C1.

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GB 2306884 A discloses the effect on an explosion is reduced by annularly spraying a liquid to generate a liquid dispersion to at least partly surround an explosive body and detonating the explosive body in the liquid dispersion (see Abstract).

GB 2306884 A does not disclose that the explosive body is a rocket motor having a propellant. However, it would have been obvious to one of ordinary skill in the art at the time was made to use a rocket motor having a propellant in the process of GB 2306884 A because a propellant is an explosive body and RU 2045675 C1 teaches that solid fuel rocket motors can be combusted in the presence of a liquid coolant to provide for more ecologically clean destruction of rocket motors (see English Abstract).

Neither GB 2306884 A nor RU 2045675 C1 disclose removing the venturi mechanism in the rocket prior to the burning step; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to remove the venturi mechanism in the rocket prior to the burning step in the process of GB 2306884 A because one of ordinary skill in the art would remove the venturi mechanism for safety reasons.

Neither GB 2306884 A nor RU 2045675 C1 disclose that the motor is clamped in a substantially vertical position with exhaust end facing up; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to clamp the motor in a substantially vertical position with exhaust end facing up in the process of GB 2306884 A because one of ordinary skill in the art would secure the motor in place with exhaust end facing up to allow for exhaust gas to freely release upward to ensure safety.

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Neither GB 2306884 A nor RU 2045675 C1 disclose filtering liquid in the enclosure and recycling the filtered liquid; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to filter liquid in the enclosure and recycle the filtered liquid in the process of GB 2306884 A because one of ordinary skill in the art would optimize the process for cost efficiency reasons by filtering and reusing valuable coolant already present instead of buying and using new coolant and also having to deal with disposing of used coolant.

Neither GB 2306884 A nor RU 2045675 C1 disclose deflecting contaminated water to within a shroud or hood; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to deflect contaminated water to within a shroud or hood in the process of GB 2306884 A because it is well known in the art and conventional to use a shroud or hood to avoid the spread of contaminated water/vapor into the atmosphere or earth.

Conclusion

12. No claims are allowed.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eileen E. Nave whose telephone number is (703) 305-0033.

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Nave/een

March 5, 2001

Wayne Langel
WAYNE LANGEL
PATENT EXAMINER
GROUP 110